

CLIMATOLOGICAL DATA FOR AUGUST, 1913.

DISTRICT NO. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

GENERAL SUMMARY.

The month in the Colorado Basin was showery, but the amount of rainfall was much less than the average for August. There was an excess of cloudy weather, and, considering the large number of thunderstorms, many unaccompanied by precipitation, there was a general absence of squalls. In Arizona and western New Mexico temperatures were somewhat below the normal, while an excess was general in the remainder of the district. The ranges were generally in fair condition as regards feed and water. The section director for Arizona reports that the summer showers have not been heavy enough at any time to supply water for the Salt River Valley irrigated lands, and the Roosevelt reservoir has been heavily drawn upon; that the water in the dam is below the 130-foot mark; and that the amount of stored water is less than one-half the supply a year ago.

TEMPERATURE.

The monthly mean for the stations reporting was 72.1° , or 0.1° above the normal. The mean for August, 1912, was 70.8° . The highest monthly mean was 91.7° , at Parker, Ariz., and the lowest, 53.5° , at Fraser, Colo. In general, the first 18 days were cooler than the normal, especially in central and northwestern Arizona. During the remainder of the month temperatures, except for a day or two here and there, were somewhat higher than the normal. As the result of the absence of marked warm spells the highest temperature at the different stations occurred somewhere on every date but the 3d. The lowest temperatures also occurred on a number of dates, principally about the middle of the month. Freezing temperatures were reached in western Wyoming, western Colorado, and eastern Utah, and light frosts occurred in parts of eastern Utah and in northern Arizona. The highest temperature, 118° , occurred at Parker, Ariz., on the 18th, and the lowest, 27° , at Dillon, Colo., on the 8th, and at Strawberry Tunnel (east) and Scofield, Utah, on the 17th and 18th, respectively.

Details of temperature are summarized in the following table:

States or parts of States in District No. 9.	Temperature.					
	Mean.	Departure from normal.	Highest.	Station.	Lowest.	Station.
Western Wyoming.....	62.9	+3.4	95	Green River ..	29	Pinedale.
Western Colorado.....	65.4	+1.9	102	Delta	27	Dillon.
Eastern Utah.....	70.5	+0.8	104	At 2 stations..	27	At 2 stations.
Western New Mexico.....	70.7	-1.3	103	Cliff	35	Luna.
Arizona.....	78.6	-0.9	118	Parker	36	At 2 stations.
Southeastern Nevada.....	79.6	+6.2	109	Logan	40	Caliente.

PRECIPITATION.

The average for the stations reporting was 1.54 inches, or 0.63 inch below the normal. The average for August, 1912, was 1.88 inches. Showers occurred somewhere in the district every day. In Wyoming the weather was dry from the 10th to 26th; in the remainder of the district showers were least common from the 14th to 17th, inclusive. Rainfalls of an inch or more in 24 hours occurred 4 times in western Colorado, 2 in eastern Utah, 4 in western New Mexico, and 22 times in Arizona. The greatest monthly amount was 6.04 inches at Dos Cabezas, Ariz., and the least, a trace, at Fort Duchesne, Utah. No snowfall was reported.

The average number of days with 0.01 inch or more precipitation was 4 in western Wyoming, 8 in western Colorado, 6 in eastern Utah, 8 in western New Mexico, 7 in Arizona, and 4 in southeastern Nevada. For the district as a whole the average was 7 days.

The average precipitation and departures from the normal on the different watersheds are given in the following table:

Watershed.

Green.	Grand.	San Juan.	Little Colorado.	Gila.	Mimbres.	Colorado proper.							
Average.	Average.	Average.	Average.	Average.	Average.	Average.							
Departure.	Departure.	Departure.	Departure.	Departure.	Departure.	Departure.							
0.77	-0.48	1.25	-0.82	1.93	-0.75	1.99	-0.72	1.82	-0.77	1.94	-0.53	1.22	-0.36

MISCELLANEOUS.

The average amount of sunshine in percentages, with departures from the normal, was: Grand Junction, 77, +5; Durango, 68, -10; Phoenix, 82, ±0; Yuma, 85, -5.

The relative humidity reported was: Grand Junction, 40, -1 per cent; Durango, 57, -3; Phoenix, 44, +1; and Yuma, 51, +3.

RIVERS.

Stages much lower than common prevailed in the Colorado and tributaries throughout the month.

TABLE 1.—*Climatological data for August, 1913. District No. 9, Colorado Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Wyoming.</i>																			
Battle Mountain.	Carbon.	7,300	1																
Big Piney.	Lincoln.	6,800																	
Daniel.	do.	6,740	14	58.2	+ 3.4	86	24†	30	10	50	1.05	+ 0.01	0.73	0	5	21	S	2 nw.	
Eden.	Sweetwater.	6,577	4	62.7		88	25	34	10†	51	0.36		0.20	0	4	16*	14*	0*	
Green River.	do.	6,083	8	68.0		95	25†	41	15†	51	0.79		0.36	0	3	14	13	4 w.	
Pinedale.	Fremont.	7,167	7	59.7		86	25†	29	12	52	0.83		0.69	0	2	10†	15*	0 nw.	
Wamsutter.	Sweetwater.	6,702		66.0		93	26	36	14†	54	0.73		0.48	0	5	18	7	6 sw.	
Willow Creek Cabin.	Fremont.	7,500	4																
<i>Colorado.</i>																			
Ashcroft.	Pitkin.	9,483	11	56.2	+ 1.9	83	25	33	16	45	1.91	- 0.39	0.37	0	18				
Blue Valley Ranch.	Grand.	7,525		84	22†						0.90		0.52	0	3	15	14	2	
Cascade.	San Juan.	8,900	6								2.97		0.68	0	13	12	13	6	
Cedaredge.	Delta.	6,175	15								2.63		0.50	0	14	3	6	22 w.	
Cochetopa.	Saguache.	9,038	4								0.54	- 0.84	0.30	0	6	13	16	2 sw.	
Collbran.	Mesa.	6,000	20	88.5	+ 1.0	87	4†	47	10	36	1.02		0.21	0	6	22	9	0 sw.	
Columbine.	Routt.	8,766	3								1.02		0.52	0	4	20	8	3 s.	
Columbine Ranch.	Delta.	6,925	3								1.30		0.50	0	1	30*	0*	0* w.	
Cortez.	Montezuma.	6,100	2	68.8		92 ^a	3	42 ^a	1	47 ^a	0.50		0.32	0	11	12	6	13 nw.	
Crawford (near).	Montrose.	6,600	3	68.2		87	4	47	10	34	2.08		0.43	0	3	21	7	3	
Crested Butte.	Gunnison.	8,867	3	55.7		78	25†	32	15	44	1.84		0.29	0	9	9	16	6 w.	
Delta.	Routt.	4,965	23	73.2	+ 1.1	102	4	39	4	63	0.49	- 0.41	0.43	0	10	6	22	3 s.	
Dillon.	Summit.	8,900	3	63.6		79	4†	27	8	50	1.12		0.29	0	9	9	16	6 s.	
Durango.	La Plata.	6,534	18	67.9	+ 1.6	86	27	43	16	44	1.07	- 0.72	0.44	0	10	16	22	3 s.	
Eureka.	San Juan.	10,000	6								2.34		0.47	0	12	7	14	2 se.	
Fraser.	Grand.	8,560	4	53.5		80	26	28	8†	50	0.87		0.18	0	9	9	9	22 w.	
Fruita.	Mesa.	4,510	14	74.5	+ 1.3	98	4†	44	16	51	0.23		0.96	0.07	0	5	17	12	2 se.
Glade Park.	do.	7,000	2								0.69		0.26	0	6	14	17	0 sw.	
Gladstone.	San Juan.	10,400	6								3.60		1.06	0	19	2	19	10 ne.	
Glenwood Spgs. (near).	Garfield.	5,823	15	66.1	- 1.0	92	31	38	16	47	1.11	- 0.21	0.40	0	5	25	6	10 w.	
Grand Junction.	Mesa.	4,602	22	77.4	+ 1.3	96	4	57	10	34	0.73	- 0.82	0.10	0	3	10	12	3 se.	
Grandlake.	Grand.	8,153	5								1.86		0.72	0	7	10	15	6 w.	
Grand Valley.	Garfield.	5,089	21	74.0	+ 2.7	101	21	40	16	52	0.19	- 0.82	0.11	0	4	8	18	5 sw.	
Gunnison.	Gunnison.	7,670	20	66.5	+ 7.1	82	3†	38	5†	43	1.14	- 0.18	0.40	0	7	11	20	9 sw.	
Hayden.	Routt.	6,337	6	67.8		91	27	40	1†	50	0.34		0.11	0	6	10	17	4 sw.	
Hesperus (near).	La Plata.	7,610	1								0.94		0.36	0	9	6	16	9 sw.	
Horsefly.	Montrose.	8,700	3								2.61		0.55	0	9	9	15	7 se.	
Ironton.	Oury.	10,000	3								3.31		0.81	0	16	2	20	9 s.	
Lake City.	Hinsdale.	8,686	8	60.2		81	8	40	3†	40	3.35		0.26	0	6	14	17	0 sw.	
Lay.	Moffat.	6,190	19	66.8	+ 1.3	91	22†	38	15	48	1.16	+ 0.25	0.73	0	6	15	9	7 sw.	
Mancos.	Montezuma.	6,960	14	67.6	+ 3.2	90	3†	43	16	44	0.73	- 1.72	0.25	0	5	6	15	10 sw.	
Marble.	Gunnison.	7,951	4	60.0		84	25†	35	16	46	2.18		0.45	0	9	20	11	0 w.	
Marshall Pass.	Saguache.	10,846	10	63.2	- 0.6	86	17	38	1†	46	1.28	- 0.10	0.30	0	7	15	8	8 sw.	
Meeker (near).	Rio Blanco.	6,182	21	63.2		90	17	41	16	46	0.68	- 0.95	0.43	0	4	21	9	1 sw.	
Montrose.	Monroe.	5,811	24	71.2	+ 3.8	92	4†	45	16	46	0.38	- 0.96	0.16	0	6	24	7	0 sw.	
Nast.	Pitkin.	7,953	3	58.4		83	23†	33	1	45	0.13		0.13	0	1	20	10	1 w.	
Pagosa Springs.	Archuleta.	7,108	6	63.0		90	5	32	16	55	1.77		0.68	0	11	9	22	12 sw.	
Palisades.	Mesa.	4,729	2	76.0		100	4	50	15	45	0.15		0.15	0	1	14	17	0 sw.	
Paonia.	Delta.	5,094	18	72.1	+ 1.5	96	4	49	16	42	0.96	- 0.17	0.29	0	7	8	23	0 sw.	
Pitkin.	Gunnison.	9,500	4								1.27		0.25	0	8	14	8	9 sw.	
Redcliff.	Eagle.	8,695	20								2.07	+ 0.11	0.50	0	7	17	6*	7* sw.	
Redvale.	Montrose.	6,300	67.0	67.0		90	27	42	18	45	1.12		0.34	0	4	9	20	2 sw.	
Rico.	Dolores.	8,824	11								2.39	+ 0.29	0.64	0	13	13	8	10 s.	
Rifle.	Garfield.	5,437	2	72.2		96	4	48	18	43	0.15		0.10	0	3	17	12	2 sw.	
River Portal.	Montrose.	6,570	7	70.8		94	17	48	18	42	1.49		0.59	0	7	14	16	1 sw.	
Sapinero (near).	Gunnison.	8,125	10	59.4	+ 1.0	81	4	34	16	43	3.03	- 1.49	0.72	0	13	15	14	2 w.	
Shoshone.	Garfield.	6,110	3								3.20		0.25	0	8	14	8	9 sw.	
Silverton (near).	San Juan.	9,400	6	53.8		76	4	28	16	46	5.81		1.05	0	15	1	12	18 sw.	
Spruce Lodge.	Grand.	9,600	10								1.17		0.22	0	14	8	10	13 n.	
Steamboat Springs.	Routt.	6,683	10	62.3	+ 2.7	91 ^a	27	31 ^b	16	56 ^b	0.26	- 0.75	0.17	0	4	23*	7*	0* n.	
Tacoma.	La Plata.	7,300	6								1.70		0.74	0	10	1	14	16 w.	
Telluride.	San Miguel.	8,756	1	57.4		85	3†	30	18†	53	3.37		0.50	0	18	21	8	2 e.	
Terminal Dam.	La Plata.	8,300	6								0.83		0.42	0	7	18	13	0 sw.	
Yampa (near).	Routt.	8,000	4								1.39		0.35	0	5	11 ^d	13d	3d sw.	
<i>Utah.</i>																			
Bluff.	San Juan.	4,200	1								0.59		0.56	0	2	15	16	0 sw.	
Boneta.	Wasatch.	6,750	1								1.27		0.42	0	10	4	27	4 o.	
Canaan.	Washington.	1									0.75	- 0.35	0.30	0	4	27	4	0	
Castle Dale.	Emery.	5,500	14	663	- 1.5	93	21	38	2	50	0.75	- 0.35	0.30	0	4	27	4	0	
Cisco.	Grand.	4,447	13								0.51		0.13	0	6	26	0	5 s.	
Dragon.	Uinta.	6,000	3	72.5		93	26	48	11†	38	0.51		0.23	0	8	9	18	4 sw.	
Duchesne.	Wasatch.	5,500	6	68.5		92	21	40	15	46	0.66		0.10	0	6	11	20	0 s.	
Elkhorn.	Uinta.	6,657	3								0.36		0.10	0	1	0	0	31 s.	
Emery.	Emery.	6,200	12	66.6	+ 2.7	86	10	46	8	34	0.70	- 0.87	0.70	0	7	8 ^b	0 ^b	21 ^b s.	
Escalante.	Garfield.	5,700	10	87.6	- 0.6	87	5	40	15	43	0.55	- 1.57	0.12	0	7	8 ^b	0 ^b	21 ^b s.	
Fort Duchesne.	Uinta.	4,941	25	70.0	+ 0.5	95	25†	42	7	49	T	- 0.79	T	0	0	15 ^j	5 ^j	1 ^j w.	
Fruitland.	Wasatch.	7,625	3								1.39		0.35	0	5	11 ^d	13d	3d sw.	
Grayson.																			

TABLE 1.—Climatological data for August, 1913. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.			Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direc- tion.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.						
<i>Utah—Continued.</i>																				
San Rafael.	Emery.	4,250	1	79.8	- 1.0	104	28	49	18	49	0.88	+ 0.09	0.48	0	6	10	18	3	Jos. J. Nouguier.	
St. George.	Washington.	2,880	26	89.3	+ 1.0	104	28	49	18	49	2.49	- 0.52	0	13	19	0	12	Wm. Goodspeed.		
Scofield.	Carbon.	7,625	4	58.4	-	86	22	27	18	53	1.15	- 0.50	0	4	10	4	17	B. Newran.		
Springdale.	Washington.	3,600	5	80.2	-	103	17 ^t	55	4	43	1.13	- 0.44	0	8	-	-	Hattie F. Wood.			
Strawberry (east).	Wasatch.	7,650	1	56.3	-	81	27 ^t	17	48	1.13	- 0.94	0	3	13	16	2	Reclamation Service.			
Teasdale.	Wayne.	7,000	4	64.6	-	103	21	34	6	50	1.90	-	-	-	-	-	Henry Culum.			
Thompsons.	Grand.	5,150	2	-	-	-	-	-	-	-	-	-	-	-	-	-	Mrs. A. M. Starmont.			
Tropic.	Garfield.	7,000	16	65.4	+ 0.8	88	6	41	16	40	1.38	- 0.39	0.37	0	8	4	18	E. P. Bolton.		
Trout Creek Ranger.	Uinta.	9,200	2	-	-	-	-	-	-	-	2.45	-	0.80	0	7	12	15	Forest Service.		
Vernal.	do.	5,050	16	-	-	-	-	-	-	-	-	-	-	-	-	-	H. E. Dillman.			
Victor.	Emery.	5,250	1	-	-	-	-	-	-	-	0.23	-	0.23	0	1	-	-	F. F. Noyes.		
White Rocks.	Uinta.	6,200	1	-	-	-	-	-	-	-	0.02	-	0.02	0	1	11	14	E. C. Sims.		
Woodside.	Emery.	4,645	2	-	-	-	-	-	-	-	-	-	-	-	-	-	D. P. Adams.			
<i>New Mexico.</i>																				
Alma.	Socorro.	4,800	15	72.0	- 1.2	94	47	50	29 ^t	42	3.46	+ 0.87	1.20	0	14	0	29	2	sw. Max A. Balke.	
Aragon.	do.	6	66.4	-	-	88	5	48	97	38	2.19	-	0.47	0	11	6	21	4	John R. Milligan.	
Aztec.	San Juan.	5,590	13	-	-	-	-	-	-	-	0.14	-	0.94	0	2	5	26	0	Dr. T. J. West.	
Berger's ranch.	McKinley.	8,000	1	61.0	-	84	5	37	16	46	1.54	-	0.46	0	10	7	13	Herman Berger.		
Blackrock.	do.	6,500	4	-	-	-	-	-	-	-	-	-	-	-	-	-	P. Deg Georges.			
Bloomfield.	San Juan.	5,500	18	71.3	- 1.6	92	4	43	16	43	0.82	-	0.42	0	8	2	29	Fred Le Clerc.		
Cambray.	Luna.	4,215	14	75.0	- 1.8	103	3	50	10	49	0.90	-	0.45	0	6	3	15	se. Agent, Southern Pacific R.R.		
Cliff.	Grant.	4,470	13	-	-	-	-	-	-	-	1.72	-	0.60	0	5	15	16	W. C. Belden.		
Columbus.	Luna.	4,054	4	-	-	-	-	-	-	-	-	-	0.81	0	5	8	7	Agent, E. P. & S. W. R. R.		
Crystal.	San Juan.	7,400	-	-	-	-	-	-	-	-	-	-	0.33	0	13	3	19	J. A. Molohan.		
Deming.	Luna.	4,333	36	78.7	-	98	14	55	27	35	1.46	-	0.46	0	6	22	3	Agent, Southern Pacific R.R.		
Dulce.	Rio Arriba.	6,767	16	65.6	+ 1.8	90	47	40	16	48	1.49	-	0.57	0	5	12	18	E. O. Green.		
Farmington.	San Juan.	5,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Orville Ricketts.			
Fort Bayard.	Grant.	6,152	44	70.0	- 1.2	87	37 ^t	51	29	31	3.28	-	0.03	1.07	0	15	15	9	U. S. General Hospital.	
Fruitland.	San Juan.	4,800	19	73.6	- 0.8	95	1	46	16	46	0.51	-	0.11	0.30	0	4	8	23	Cyril J. Collyer.	
Gage.	Luna.	4,480	13	81.0	-	99	16 ^t	63	97	34	0.80	-	0.35	0	2	2	31	0	Agent, Southern Pacific R.R.	
Gila Planting Station.	Grant.	6,475	2	69.0	-	86	10	53	14 ^t	29	3.98	-	2.39	0	12	16	14	U. S. Forest Service.		
G. O. S. Ranch.	do.	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Victor Culberson.			
Hachita.	Rio Arriba.	4,504	4	-	-	-	-	-	-	-	-	-	-	-	-	-	Agent, E. P. & S. W. R. R.			
Haynes.	Rio Arriba.	6,800	2	68.0	-	89	57	40	11	42	2.70	-	0.80	0	7	15	9	Mrs. O. E. Wingate.		
Hermances.	Luna.	4,451	4	-	-	-	-	-	-	-	-	-	-	-	-	-	Agent, E. P. & S. W. R. R.			
Lordsburg.	Grant.	4,245	31	75.4	- 4.4	93	14	54	29	34	0.58	+ 0.08	0.40	0	2	2	31	J. H. McClure.		
Luna.	Socorro.	7,300	12	63.0	-	87	16	35	30	49	1.69	-	0.65	0	8	0	31	C. B. Martin.		
Mimbres.	Grant.	5,007	8	-	-	-	-	-	-	-	-	-	0.80	0	9	11	20	Charles Dennis.		
Pinos Altos (near).	do.	7,253	2	-	-	-	-	-	-	-	-	-	0.48	0	11	2	29	O. L. Scott.		
Fratt.	do.	4,415	4	-	-	-	-	-	-	-	-	-	0.68	0	10	19	5	Agent, E. P. & S. W. R. R.		
Putnam.	San Juan.	6,200	1	-	-	-	-	-	-	-	-	-	-	-	-	-	C. F. Spader.			
Redrock.	Grant.	4,150	8	-	-	-	-	-	-	-	-	-	1.26	-	6	6	24	Robt. H. Woods.		
Rodeo.	do.	4,118	4	-	-	-	-	-	-	-	-	-	1.62	-	0	10	13	12	Agent, E. P. & S. W. R. R.	
Silver City.	do.	5,937	2	70.9	-	89	21 ^t	54	26	33	1.76	-	0.51	0	14	18	13	E. A. Brumback.		
<i>Arizona.</i>																				
Allaire Ranch.	Cochise.	4,184	17	-	-	-	-	-	-	-	1.17	-	1.67	0.59	0	6	14	9	se. Thomas Allaire.	
Alpine.	Apache.	5,500	4	58.4	-	80	4	36	37 ^t	42	4.32	-	1.25	0	17	5	11	w. U. S. Forest Service.		
Ashfork.	Yavapai.	5,229	2	-	-	-	-	-	-	-	1.46	-	1.30	0	4	7	21	Do.		
Aztec.	Yuma.	492	15	-	-	-	-	-	-	-	-	-	0.58	+ 0.08	0.40	0	2	8	16	Agent, Southern Pacific Ry.
Benson.	Cochise.	3,523	32	77.2	- 4.2	99	3	55	30	38	2.65	+ 0.41	1.18	0	5	10	3	18	Do.	
Bernardino.	do.	-	-	-	-	-	-	-	-	-	1.26	-	0.28	0	9	0	6	Operator, E. P. & S. W. R. R.		
Bisbee.	do.	5,350	23	-	-	-	-	-	-	-	2.34	-	2.62	0	11	-	-	Agent, E. P. & S. W. R. R.		
Blue.	Greenlee.	6,500	6	-	-	-	-	-	-	-	4.87	-	1.40	0	14	0	29	Mary A. Jones.		
Bonita.	Graham.	4,918	39	-	-	-	-	-	-	-	0.67	-	2.17	0.25	0	21	8	se. A. H. Jelley.		
Bowie.	Cochise.	3,750	37	80.4	+ 1.8	103	7	60	47 ^t	38	1.03	-	1.75	0.40	0	5	6	19	Agent, Southern Pacific Ry.	
Buckeye.	Maricopa.	980	21	88.2	+ 0.7	110	4	60	15 ^t	45	0.69	-	0.30	0	5	28	2	1. w. H. E. Kell.		
Canille.	Santa Cruz.	5,225	4	-	-	-	-	-	-	-	1.76	-	0.45	0	11	0	30	Robert A. Rodgers.		
Casa Grande.	Pinal.	1,396	32	-	-	-	-	-	-	-	-	-	0.66	0	8	7	13	Agent Southern Pacific Ry.		
Casa Grande Ruins.	do.	1,422	5	87.8	-	109	22	60	15 ^t	44	1.36	-	0.52	0	7	1	7	Frank Pinkley.		
Cavecreek (near).	Maricopa.	1,452	8	88.8	-	106	27	64	16	40	0.63	-	0.15	0	10	14	15	sw. John B. Lambers.		
Chandler.	do.	1,213	18	90.3	+ 33	112	20	69	11 ^t	36 ^t	0.58	-	0.89	0.20	0	4	21	F. V. N. Dana.		
Chin Lee.	Apache.	6,000	5	65.6	-	85	27	45	16	35	0.51	-	0.16	0	6	1	8	Rev. L. Osterman, O. F. M.		
Chlarsons Mill.	Graham.	8,000	6	64.0	-	78	57 ^t	42	1	32	2.86	-	1.14	0	15	1	30	Hiram R. Chlarsom.		
Clifton.	Greenlee.	3,584	22	83.2	-	101	4	65	10 ^t	32	3.57	-	1.24	1.23	0	8	15	L. C. Kyhl.		
Cochise.	Cochise.	4,219	15	77.1	- 2.4	98	21	59	15	36	1.68	-	0.43	1.08	0	5	11	14	Agent, Southern Pacific Ry.	
Columbia.	Yavapai.	1,900	13	88.0	+ 1.6	105	12 ^t	68	14	36	2.88	-	0.85	1.25	0	9	17	11	M. J. Nolan.	
Cornville.	do.	3,300	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N. F. Girdner.		
Courtland.	Cochise.	4,543	4	-	-	-	-	-	-	-	1.15	-	0.60	0	3	19	8	4. w. Do.		
Don Luis.	do.	5,025	1	-	-	-	-	-	-	-	1.61	-	0.40	0	11	0	3	sw. Neil Erickson.		
Dos Cabezos.	do.	5,250	5	71.8	- 3.5	92	47 ^t	50	16	40	6.04	-	3.18	0	11	9	32	Dr. F. T. Wright.		
Douglas.	do.	3,930	10	74.6	- 3.5	98	17 ^t	49	30	44	2.28	-	1.00	0.47	0	13	6	18	George F. Cook.	
Dudleyville.	Pinal.	2,204	22	77.3	- 4.6	96	47 ^t	56	16	35	0.98	-	1.53	0.29	0	12	1	25	George Heebe.	
Elgin.	S																			

TABLE 1.—Climatological data for August, 1913. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
Arizona—Continued.																						
Keams Canyon.	Navajo.	6,600	9	70.3		89	5†	48	15†	39	1.37	0.64	0	2	4	26	1	s.	Fred A. Bartram.			
Kingman.	Mohave.	3,326	10	83.0	+ 2.1	103	9	54	17	39	1.10	- 0.75	1.00	0	5	14	0	s.	Agent, A. T. & S. F. Ry.			
Lakeside.	Navajo.	6,500	15	83.6		96	29	42	16	49	1.68	- 0.67	0.80	0	9	6	7	18	s.w.	Jesse H. Rogers.		
Lewis Springs.	Cochise.	4,029	4								3.57		1.10	0	8	1	21	9	s.w.	Agent, E. P. & S. W. R. R.		
Lowell Observatory.	Coconino.	7,180	12								2.72		0.69	0	17				w.	Vesto M. Slipher.		
McNeal.	Cochise.	4,150	3								2.72		0.54	0	9	7	16	8	se.	George J. Jones.		
Maricopa.	Pinal.	1,180	37	90.2	- 1.6	112	21†	67	15	37	0.52	- 0.51	0.20	0	5	11	2	w.	Agent, Southern Pacific Ry.			
Marinette.	Maricopa.	1,150	1	88.4		109	4†	60	16	44*	1.42		0.90	0	5	6	3	22	w.	Theo. Katzenstein.		
Moccasin.	Mohave.	4,500																	j. g. Maxwell.			
Mohawk Summit.	Yuma.	538	13	90.8	- 3.2	114	23	63	30	45	0.25	- 0.52	0.25	0	1	9	8	14	n.	Agent, Southern Pacific Ry.		
Naco.	Cochise.	4,579	4										1.76		0	7	1	23	7	se.	Agent, E. P. & S. W. R. R.	
Natural Bridge.	Gila.	4,990	24										2.52	- 0.84	1.53	0	7	6	24	1	sw.	D. G. Goodfellow.
Nutrioso.	Apache.	8,000	3										3.69		0.80	0	14	5	10	16	sw.	U. S. Forest Service.
Oracle.	Pinal.	4,502	19	76.0	- 1.6	92	22	60	14†	27	3.17	- 2.05	1.32	0	9	1	4	26	w.	J. W. Lawson.		
Osborn.	Cochise.	4,676	4										0.56	0	8	0	24	7	w.	Agent, E. P. & S. W. R. R.		
Paradise.	Pinal.	5,436	7	68.4		89	17	46	31	37	1.78		0.43	0	8	0	31	0	nw.	J. C. Hancock.		
Parker.	Yuma.	345	17	91.7	+ 0.5	118	19†	61	16	55	0.64	- 0.24	0.26	0	5	22	9	0	sw.	M. A. Israel, M. D.		
Payson.	Gila.	5,550	5	70.5		90	5	45	14†	36	4.25		2.45	0	8	5	0	26	e.	Mart McDonald.		
Phoenix.	Maricopa.	1,108	19	86.7	- 2.3	105	23	68	16	31	0.32	- 0.64	0.14	0	11	12	10	9	e.	U. S. Weather Bureau.		
Phoenix (1).	do.	1,092	23	85.2	- 2.5	108	23	68	16	34	0.58	- 0.46	0.45	0	4	12	10	9	sw.	David Aepli.		
Phoenix (2).	do.	1,159	5	85.8		102	4†	64	18†	34	0.28		0.08	0	5	16	10	5	sw.	Salt River Valley Nurseries.		
Pinal Ranch.	Pinal.	4,520	19								2.86	- 0.55	0.52	0	10				irion & Craig.			
Pinedale.	Navajo.	6,500	1								1.81		0.32	0	11	1	26	4	sw.	E. Thomas, Jr.		
Pinto.	Apache.	5,660	9								0.65		0.55	0	2	16	15	0	sw.	Cecil F. Henning.		
Prescott.	Yavapai.	5,320	46	69.0	- 2.0	89	21	43	16	39	2.50	- 0.59	0.71	0	10	7	16	8	sw.	Dr. J. W. Flinn.		
Prescott Dry Farm.	do.	5,008	1	73.2		91	5†	52	17	36	1.95		0.70	0	7	5	26	0	sw.	L. L. Bates.		
Quartzsite.	Pinal.	800	6	91.0		113	23	68	17†	40	1.38		0.50	0	7	6	24	1	w.	W. E. Scott.		
Redrock.	Pinal.	1,864	4								2.42		0	5	13	2	16	nw.	Agent, Southern Pacific Ry.			
Rice.	Gila.	2,540	30																Arthur Pritchard.			
Roosevelt.	do.	2,175	9	86.2		103	21	68	15	31	0.20		0.20	0	1	0	30	1	e.	U. S. Reclamation Service.		
Sacaton.	Pinal.	1,280	6	88.8		110	4†	61	17	42	0.73		0.39	0	3				sw.	E. W. Hudson.		
St. Johns.	Apache.	5,650	9	71.84		92	5†	45	17	34	1.75		0.70	0	7	2	6	23	sw.	Alexander Shreeve.		
St. Michaels.	do.	6,950	26	69.0	+ 1.7	89	3†	47	31	40	3.18	- 0.64	0.70	0	9	11	2	2	sw.	Rev. Anselm Weber, O. F. M.		
Salome.	Yuma.	1,875	6																sw.	August Nord.		
San Simon.	Cochise.	3,609	27	76.2	- 4.2	101	6	47	6	54	0.35	- 1.27	0.15	0	3	8	20	3	se.	Agent, Southern Pacific Ry.		
Seligman.	Yavapai.	5,219	8	70.4		92	18	42	15†	47	3.37		0.85	0	9	7	0	24	sw.	Librarian, A. T. & S. F. Ry.		
Sentinel.	Maricopa.	685	15	90.5	- 2.2	110	4	67	31	33	1.03	+ 0.47	1.01	0	2	7	24	0	w.	Agent, Southern Pacific Ry.		
Silverbell.	Pima.	2,664	8			104	22				2.73		0.57	0	12	22	5	4	s.	Imperial Copper Co.		
Snowflake.	Navajo.	5,644	6	68.1		91	6	41	15†	41	1.28		0.73	0	5	6	0	25	sw.	William J. Flake.		
Springerville.	Apache.	6,862	3	64.4		86	10	45	19	36	2.14		0.82	0	5	23	2	6	sw.	U. S. Forest Service.		
Supai.	Cononino.	3,200	7	81.8		101	21†	62	17†	38	1.14		0.35	0	9	6	12	13	sw.	Laure B. Symons.		
Tempe.	Maricopa.	1,165	9	86.8		108	4	61	15†	42	0.83		0.49	0	17	15	15	1	nw.	F. H. Simmons.		
Thatcher.	Graham.	2,800	10	82.6	- 2.1	105	6	60	15†	41	2.48	+ 0.48	2.07	0	6				sw.	J. H. Larson.		
Thomas.	Coconino.	5,200	1								1.84		0.89	0	13	4	26	2	sw.	L. H. Thomas.		
Tombstone.	Cochise.	4,550	18	77.6	+ 1.6	95	21†	60	31	33	2.88	- 0.83	1.45	0	7	2	29	0	sw.	F. N. Walcott.		
Truxton.	Mohave.	3,997	3																sw.	Truxton Canyon Indian School.		
Tuba.	Coconino.	4,500	13	77.7	+ 2.0	99	16	50	16	49	0.49	- 0.27	0.37	0	7	5	25	1	sw.	Ira Bell.		
Tucson.	Pima.	2,390	33	83.5	- 1.7	103	4†	63	15	35	1.21	- 1.17	0.75	0	6	12	7	12	e.	University of Arizona.		
Tucson (1).	do.	2,380	5	77.5		103	22	45	15	53 ^b	3.36		2.06	0	11	8	22	0	sw.	Rev. James F. Record.		
Tucson (2).	do.	2,526	4	82.7		102	4†	61	16	35	1.37		0.50	0	13	11	9	9	w.	U. S. Coast and Geodetic Survey.		
Vail.	do.	3,421	14	77.0		100	4†	52	31	44	1.20	- 0.11	0.80	0	3	3	28	0	sw.	Agent, Southern Pacific Ry.		
Walnut Grove.	Yavapai.	3,649	20										2.57	+ 0.45	0.77	0	11			sw.	J. O. Carter.	
Wickenburg.	Maricopa.	2,072	15	86.0	+ 1.3	110	2	54	17	47	0.11	- 1.72	0.04	0	5	9	0	22	sw.	Agent, S. F. P. & P. Ry.		
Wilcox.	Cochise.	4,164	32	74.9	- 3.1	98	2†	48	5	48	2.18	- 0.30	1.00	0	4	7	24	0	sw.	Agent, Southern Pacific Ry.		
Williams.	Coconino.	6,750	13	68.3	+ 1.8	99	19	48	18	47	2.90	+ 0.21	0.80	0	6	7	24	0	sw.	E. J. Nordyke.		
Winslow.	Navajo.	4,855	9																sw.	Winslow High School.		
Yuma.	Yuma.	141	33	90.1	0.0	112	4	68	15	38	0.28	- 0.07	0.16	0	3	24	6	1	sw.	U. S. Weather Bureau.		
Yuma (1).	do.	150	6	85.2		108	4	57	16	41	0.58		0.30	0	4	17	14	0	sw.	C. J. Wood.		
Nevada.																						
Caliente.	Lincoln.	4,407	3	67.1		86	11†	40	19	45	0.18		0.09	0	3				ne.	Salt Lake Route.		
Las Vegas.	Clark.	2,033	11	84.8	+ 6.2	107	5†	55	18	45	0.86	+ 0.19	0.50	0	4	14	13	4	s.	C. P. Squires.		
Logan.	do.	1,355	6	86.0		109	5	54	15	46	0.74		0.45	0	4	22	8	1	s.	Orin W. Jarvis.		

^{a, b, c, etc.}, indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for August, 1913. District No. 9, Colorado Valley.*

TABLE 2.—*Daily precipitation for August, 1913. District No. 9—Continued.*

TABLE 2.—*Daily precipitation for August, 1913. District No. 9—Continued.*

Stations.	Watershed.	Day of month.																													Total				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Arizona—Contd.																																			
Naco.	San Pedro.	.21	.13			.30	.20			.25				T.																			.25	1.75	
Natural Bridge.	Verde.	.12	.13			T.	T.	.36	.28	.23	.25																							2.52	
Nutrioso.	Little Colo.					.06		.05		.38	.80	.54																					3.69		
Oracle.	San Pedro.	.85				.06	T.	.26	T.		.56	.10	.22																			3.17			
Osborn.	do.						T.				.05	.28		.31																			.33		
Paradise.	Desert.							.12		.43	T.																						1.78		
Parker.	Colorado.								.02	.08																							0.64		
Payson.	Verde.								.15		.28	T.	.24	.24	.06																	4.25			
Phoenix.	Salt.	.01	T.	.14	T.					.01	T.	.01		.02	.04																	0.32			
Phoenix (1).	do.	T.	T.	.45	T.					.03	T.	T.	.08	.02	T.																	0.58			
Phoenix (2).	do.	T.		.07						T.	T.		.05	.04																		0.28			
Pinal Ranch .	Gila.								.04	.18	.50	.35	.25	.45																	2.86				
Pinedale.	Little Colo.									.24		.22	.32		.17	.02																1.81			
Pinto.	do.									T.	T.		T.	T.																			0.65		
Prescott.	Hassayampa.	T.	T.	.23						T.	T.		.71	.16	.46	.27																2.50			
Prescott Dry Farm.	Verde.	.13											.28		.03	.20																1.95			
Quartzsite.	Colorado.	.50											.04																				1.38		
Redrock.	Santa Cruz.	.27																															2.42		
Rice.	Gila.																																		
Roosevelt.	Salt.																																	0.20	
Sacaton.	Gila.																																	0.73	
St. Johns.	Little Colorado.																																	1.75	
St. Michaels.	do.	T.	T.	T.	T.	T.	T.																											3.18	
Salome.	Colorado.																																		
San Simon.	Gila.																																	0.35	
Seligman.	Verde.	.55																																3.37	
Sentinel.	Gila.																																	1.03	
Silverbell.	Santa Cruz.	.11	.14																															42	
Snowflake.	Little Colorado.	T.	T.																															1.28	
Springerville.	do.																																	2.14	
Supai.	Colorado.	.35	.16																																1.14
Tempe.	Salt.	.03	T.	.07																														49	
Thatcher.	Gila.	.10																																2.48	
Thomas.	Verde.	.89	.30	T.	T.																												1.84		
Tombstone.	San Pedro.																																	2.88	
Truxton.	Colorado.																																		
Tuba.	Little Colorado.	T.	T.	T.																														0.49	
Tucson.	Santa Cruz.	T.																																1.21	
Tucson (1).	do.	.03																																3.36	
Tucson (2).	do.	.01																																1.37	
Vail.	do.																																	1.20	
Walnut Grove.	Hassayampa.	.20																																2.57	
Wickenburg.	do.																																	0.11	
Wilcox.	Desert.																																	2.16	
Williams.	Colorado.																																	2.90	
Winslow.	Little Colorado.																																		
Yuma.	Colorado.																																	0.28	
Yuma (1).	do.	T.																																0.58	
Nevada.																																			
Caliente.	Colorado.																																	0.18	
Las Vegas.	do.																																	0.88	
Logan.	do.																																	0.74	

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures for August, 1913. District No. 9, Colorado Valley.

Date.	Wyoming.				Colorado.								Utah.								New Mexico.							
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Hite.		Moab.		St. George.		Duchesne.		Bloomfield.		Fort Bayard.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	81	34	92	41	84	50	92	55	78	41	82	38	83	33	80	58	100	73	98	62	92	59	89	47	89	57	83	61
2....	82	44	88	45	83	57	92	71	79	40	82	47	83	38	81	55	99	71	101	62	82	54	88	50	90	61	83	59
3....	77	42	89	54	88	52	93	63	92	49	88	45	84	43	77	53	100	73	101	56	91	55	88	52	90	53	87	56
4....	78	45	86	46	88	51	96	65	81	41	78	48	83	43	80	57	104	68	100	61	99	69	85	51	92	55	86	56
5....	74	44	82	46	88	51	91	64	81	38	80	48	79	42	85	59	100	72	99	59	101	60	85	51	91	52	85	55
6....	71	40	84	44	85	56	92	64	77	38	82	47	81	52	104	76	100	60	98	61	86	48	88	65	87	60	85	58
7....	71	35	84	41	87	49	90	62	77	39	82	43	80	34	80	55	103	68	98	54	101	62	87	54	84	53	83	55
8....	72	35	84	43	87	47	93	62	81	39	83	42	84	33	79	48	100	68	98	54	96	66	85	65	82	53	84	58
9....	72	37	78	56	79	55	80	62	74	38	71	45	76	35	91	47	96	74	92	69	97	66	77	54	80	52	84	58
10....	74	30	84	45	86	51	87	57	80	47	79	43	85	51	97	60	94	54	92	63	81	45	85	53	87	63		
11....	76	37	75	49	80	59	76	65	81	44	76	45	78	38	82	56	87	70	88	62	93	66	77	52	80	63	83	58
12....	74	42	85	43	82	56	87	64	77	45	88	51	79	58	98	68	95	56	98	65	81	48	81	59	79	56		
13....	76	35	87	48	81	49	91	62	82	49	80	43	83	42	75	60	98	70	98	59	98	62	83	47	85	58	77	57
14....	75	36	86	50	85	51	94	67	80	47	84	44	85	40	73	67	100	71	98	62	98	59	88	44	87	57	80	53
15....	76	32	89	41	85	44	91	61	81	49	83	42	87	33	80	60	97	67	96	51	94	57	86	40	84	50	83	56
16....	79	32	80	43	87	48	92	62	80	50	85	39	87	31	83	58	94	60	99	48	90	54	87	43	86	43	85	57
17....	79	31	90	43	84	52	92	60	79	51	86	40	87	37	77	58	98	62	96	52	94	56	89	46	87	51	84	58
18....	80	31	89	42	85	49	91	59	82	49	84	38	87	40	79	58	99	59	94	54	98	49	90	49	88	63	84	62
19....	82	32	92	42	86	54	93	66	79	43	85	44	87	40	80	53	102	72	102	59	93	54	88	49	88	63	80	57
20....	82	37	89	52	88	56	94	68	77	43	84	46	90	39	82	53	102	72	100	65	100	65	86	56	87	60	83	59
21....	84	35	91	53	82	51	96	66	76	44	85	53	86	40	81	55	102	77	101	61	101	71	92	55	88	55	84	58
22....	85	37	95	57	79	56	91	63	72	47	84	44	88	40	80	50	97	78	98	65	99	70	94	53	83	58		
23....	79	44	94	60	85	51	93	66	77	48	85	43	89	36	82	60	103	75	100	64	95	74	91	57	85	62	81	61
24....	86	40	92	50	81	58	90	68	69	51	81	50	86	44	81	61	97	68	96	65	99	67	86	50	86	62	83	57
25....	86	41	94	45	86	52	95	64	82	41	84	46	89	37	80	60	102	69	101	60	100	69	90	54	88	61	81	59
Mins.	78.0	38.4	87.8	48.3	84.0	51.8	90.9	63.9	78.6	44.4	81.8	44.7	84.4 ^b	40.2 ^b	80.3	57.0	99.0	69.7	98.1	59.5	98.7	62.9	86.2	50.8	86.1	56.5	82.5	57.4
Date.		Arizona.																				Nevada.						
		Douglas.		Flagstaff.		Fort Apache.		Grand Canyon.		Parker.		Phoenix.		Prescott.		St. Michaels.		Tucson.		Yuma.		Logan.						
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.			
1....	89	67	72	54	87	56	80	44	106	72	100	72	84	58	82	51	95	69	106	72	97	69						
2....	93	65	75	50	92	52	82	48	111	73	102	82	85	59	96	52	99	71	110	78	102	66						
3....	93	53	77	48	90	55	82	46	111	71	101	79	83	57	89	54	101	72	111	78	102	70						
4....	97	53	79	51	91	57	84	52	114	79	104	76	86	57	86	50	103	70	112	80	107	73						
5....	96	59	80	49	91	58	84	54	116	77	102	79	87	56	88	52	101	74	101	83	109	75						
6....	97	53	76	52	90	55	86	56	106	76	97	76	78	61	89	56	99	62	102	76	105	67						
7....	92	53	76	57	91	58	85	60	105	78	94	79	79	57	83	57	98	60	98	69	106	73						
8....	94	54	71	57	81	52	92	60	102	76	96	74	77	58	82	58	91	70	106	76	99	75						
9....	93	57	72	54	84	55	83	58	108	74	98	73	78	56	77	53	95	68	105	77	102	67						
10....	94	53	76	48	89	56	82	56	103	76	87	72	80	56	84	50	95	68	102	77	101	69						
11....	92	55	72	54	85	53	82	54	109	75	95	70	79	58	80	55	94	67	104	76	104	73						
12....	94	56	78	49	86	53	84	56	110	75	102	75	83	59	80	52	97	71	107	76	104	67						
13....	93	55	78	48	89	53	84	54	110	65	102	72	83	53	81	49	98	73	107	73	106	60						
14....	96	57	77	45	87	48	93	53	108	62	100	75	83	50	84	53	100	71	106	75	102	58						
15....	94	53	78	40	87	48	93	52	112	62	99	68	82	47	89	49	98	73	106	68	102	54						
16....	92	55	77	38	89	57	80	52	116	61	99	68	82	43	85	48	96	64	105	69	100	55						
17....	98	59	79	44	90	58	82	50	116	71	98	69	83	44	87	55	97	68	104	76	99	55						
18....	92	55	80	46	90	65	81	51	116	71	99	74	86	52	88	51	99	73	104	71	103	58						
19....	93	53	80	55	90	69	84	48	118	75	102	79	85	59	87	58	98	73	104	79	103	65						